

(h) *Observations of Phenomena of Jupiter's Satellites with the 9-inch Cooke Equatorial Refractor at Mr. Crossley's Observatory, Bermerside, Halifax, in 1896-7.* By Joseph Gledhill.

| Day of<br>Obs. | Satellite. | Phenomenon. | Phase.        | G.M.T. of<br>Observation. | G.M.T. of<br><i>N. Almanac.</i> |
|----------------|------------|-------------|---------------|---------------------------|---------------------------------|
| 1897.          |            |             |               | h m s                     | h m s                           |
| Jan. 18        | I.         | Sh. I.      | Int. contact  | 12 14                     | 12 10                           |
|                | I.         | Tr. I.      | Int. contact  | 12 57 30                  | 12 58                           |
| 27             | I.         | Tr. I.      | Ext. contact  | 9 11                      | 9 10                            |
| Feb. 26        | I.         | Tr. I.      | Ext. contact  | 10 31                     | 10 33                           |
|                |            |             | Bisection     | 10 32                     |                                 |
|                |            |             | Int. contact  | 10 33                     |                                 |
|                | I.         | Sh. I.      | Int. contact  | 10 41                     | 10 38                           |
| 27             | I.         | Ec. R.      | First seen    | 10 2 48                   | 10 3 48                         |
|                |            |             | Bisection     | 10 4                      |                                 |
|                |            |             | Full          | 10 5                      |                                 |
|                | I.         | Oc. D.      | First contact | 7 40                      | 7 41                            |
|                |            |             | Bisection     | 7 42                      |                                 |
|                |            |             | Gone          | 7 43                      |                                 |
| Mar. 1         | II.        | Tr. I.      | Ext. contact  | 7 57                      | 7 55                            |
|                |            |             | Bisection     | 7 59                      |                                 |
|                |            |             | Int. contact  | 8                         |                                 |
|                | II.        | Sh. I.      | Int. contact  | 8 17                      | 8 13                            |
|                | II.        | Tr. E.      | Int. contact  | 10 43                     | 10 46                           |
|                |            |             | Bisection     | 10 45                     |                                 |
|                |            |             | Ext. contact  | 10 47                     |                                 |
| 16             | III.       | Sh. E.      | Int. contact  | 8 25                      | 8 33                            |
|                |            |             | Bisection     | 8 27                      |                                 |
|                |            |             | Off           | 8 30                      |                                 |
| 17             | II.        | Oc. D.      | Ext. contact  | 7 25                      | 7 26                            |
| Apr. 5         | I.         | Oc. D.      | Ext. contact  | 10 53                     | 10 53                           |
|                |            |             | Bisection     | 10 54 30                  |                                 |
|                |            |             | Gone          | 10 56                     |                                 |
| 10             | III.       | Ec. R.      | First seen    | 10 20 43                  | 10 20 23                        |
|                |            |             | Full          | 10 23                     |                                 |
| 22             | I.         | Tr. E.      | Ext. contact  | 8 38                      | 8 38                            |
| 27             | II.        | Sh. E.      | Int. contact  | 7 42?                     | 7 48                            |
| 28             | III.       | Sh. E.      | Int. contact  | 8 12?                     | 8 24                            |
|                |            |             | Bisection     | 8 17?                     |                                 |
| June 12        | II.        | Sh. I.      | Int. contact  | 10                        | 9 57                            |
|                | II.        | Tr. E.      | Ext. contact  | 10 24                     | 10 24                           |
| 14             | IV.        | Sh. I.      | Ext. contact  | 9 44                      | 9 45                            |
|                | I.         | Sh. I.      | Bisection     | 9 49 30                   | 9 48                            |
|                |            |             | Int. contact  | 9 51 30                   |                                 |

3 B

Notes.

The above are the only observations of these phenomena that were made here. The observing conditions were so bad and the clear nights so few that few observations could be made, and those of poor quality. The following summary will show that an exceptionally bad winter and spring were experienced here:—

|           | <i>a</i> |   | <i>c</i> | <i>d</i> | <i>e</i> | <i>f</i> | <i>g</i> |
|-----------|----------|---|----------|----------|----------|----------|----------|
| 1896 Oct. | 0        | 2 | 9        | 4        | 10       | 18       | 40       |
| Nov.      | 0        | 1 | 10       | 7        | 13       | 18       | 52       |
| Dec.      | 0        | 2 | 4        | 2        | 14       | 24       | 24       |
| 1897 Jan. | 0        | 4 | 8        | 3        | 13       | 16       | 46       |
| Feb.      | 0        | 4 | 4        | 3        | 11       | 18       | 28       |
| Mar.      | 0        | 3 | 12       | 1        | 9        | 18       | 48       |
| Apr.      | 3        | 3 | 5        | 0        | 8        | 14       | 40       |

*a* Number of really good nights. *b* Fairly good. *c* Bad.  
*d* Clear all night. *e* Sunless days. *f* Starless nights.  
*g* Number of clear night hours in the month.

Errata in Mr. Gledhill's paper, MONTHLY NOTICES, vol. lvi.

Page 483, line 11, for  $218^{\circ}$  read  $213^{\circ}$ .  
 „ „ „ 26, for  $367^{\circ}0$  read  $267^{\circ}1$ .  
 „ 484, line 13, for  $119^{\circ}8$  read  $122^{\circ}3$ .  
 „ 498, line 11, for  $7^{\circ}4$  read  $8^{\circ}4$ .  
 „ „ „ 17, for  $24^{\circ}9$  read  $25^{\circ}9$ .  
 „ „ „ 18, for  $26^{\circ}6$  read  $20^{\circ}5$ .

The values of  $L$  and  $\lambda$  were simply approximate values, and no correction was applied for “the differences of successive values of the longitude of Jupiter's central meridian.”